WHAT IS CLAIMED IS:

1.   A method of identifying a translation in a target language for at least one source word in a source language, the method comprising:

  transforming a representation of context words in the source language into a transformed representation of context words in the target language based in part on multiple different translations for at least one context word in the target language;

  determining candidate representations of context words for at least two candidate translations in the target language;

  using the transformed representation to score each candidate representation; and

  selecting a candidate translation based on the scores for the candidate representations.

2.   The method of claim 1 wherein the representation of context words in the source language comprises a frequency vector wherein each element in the frequency vector comprises a count of the number of times a respective word in the source language appears as a context word for the at least one source word.

3.   The method of claim 2 wherein transforming the representation of context words in the source language comprises using a probability of a word in the target language.

4.   The method of claim 3 wherein the probability of the word in the target language is trained using an iterative algorithm.

5.   The method of claim 4 wherein the iterative algorithm utilizes a probability that is based in part on entries in a translation dictionary.

6.   The method of claim 4 wherein the iterative algorithm comprises an expectation-maximization algorithm.

7.   The method of claim 3 wherein transforming the representation of context words in the source language comprises forming a frequency vector as the transformed representation.

8.   The method of claim 3 wherein transforming the representation of context words in the source language comprises forming a term frequency-inverse document frequency vector.

9.   The method of claim 8 wherein each candidate representation comprises a term frequency-inverse document frequency vector.

10. The method of claim 1 wherein the transformed representation comprises a vector and each candidate representation comprises a vector and using the transformed representation to score each candidate representation comprises determining the cosine of the angle between the transformed representation vector and each candidate representation vector.

11. The method of claim 1 wherein using the transformed representation to score each candidate representation comprises determining a score using a function that is based on the transformed representation and the candidate representation.

12. The method of claim 11 wherein the candidate representation comprises a probability of a context word in the target language given a candidate translation.

13. A computer-readable medium having computer-executable instructions for performing steps comprising:

    receiving a string of words in a source language;

    transforming the string of words into a transformed representation using an iterative algorithm;

    using the transformed representation to score strings of words in the target language.

14.   The computer-readable medium of claim 13 further comprising selecting a string of words in the target language based on the score.

15.   The computer-readable medium of claim 14 further comprising identifying pages containing the selected string of words in the target language as relevant to the string of words in the source language.

16.   The computer-readable medium of claim 13 wherein receiving a string of words comprises identifying multiple strings of words, each string representing a context for a word in the source language.

17.   The computer-readable medium of claim 16 wherein transforming the string of words comprises forming a frequency vector from the strings of words and transforming the frequency vector into a transformed frequency vector.

18.   The computer-readable medium of claim 17 wherein using the transformed representation to score a string of words in the target language comprises determining a probability for each word in the string of words in the target language and using the probabilities for the words and the transformed frequency vector to score the string of words in the target language.

19.   The computer-readable medium of claim 17 wherein using the transformed representation to score a string of words in the target language comprises forming a target frequency vector based on the string of words and using the target frequency vector and the transformed frequency vector to score the string of words.

20.   The computer-readable medium of claim 19 wherein using the transformed representation to score a string of words in the target language comprises forming a single score for multiple strings of words in the target language.

21.   The computer-readable medium of claim 17 wherein transforming the string of words further comprises forming a transformed term frequency-inverse document frequency vector based in part on the frequency vector.

22.   The computer-readable medium of claim 21 wherein using the transformed representation to score a string of words in the target language comprises forming a target term frequency-inverse document frequency vector based in part on the string of words and using the transformed term frequency-inverse document frequency vector and the target term frequency-inverse document frequency vector to score the string of words.

23.   The computer-readable medium of claim 13 wherein the iterative algorithm is an expectation-maximization algorithm.

24.   A method of updating a translation dictionary, the method comprising:

>   providing two possible translations for a
>   word to at least two clients;
>   receiving an indication from each of the
>   clients as to which translation was
>   deemed correct;
>   using the indications from the clients to
>   select one of the translations for
>   entry in a translation dictionary.

25.   The method of claim 24 wherein providing a possible translation comprises examining a page on a network to find a possible translation for a word.

26.   The method of claim 25 further comprising providing a link to a page containing the possible translation along with the possible translation.

27.   The method of claim 24 wherein providing the at least two possible translations to a client further comprises receiving a request from the client for a translation of a word before providing the at least two possible translations.

28.   The method of claim 24 wherein using an indication from the client to select at least one

translation comprises determining if a translation was deemed correct more than a threshold number of times.

29.   The method of claim 24 further comprising not using an indication from a client to select a translation if the client has provided more than a threshold number of indications for a translation.

30.   A computer-readable medium having computer-executable instructions for performing steps comprising:

>   serving a page to a client to solicit a source phrase from the client;
>
>   receiving the source phrase from the client;
>
>   accessing pages through a network to identify translations for the source phrase;
>
>   returning a candidate translation for the source phrase and a page identifier that identifies the page that contains the translation to the client;
>
>   receiving an indication as to whether the client accepts the candidate translation as a proper translation of the source phrase; and
>
>   using the indication to determine whether to add the translation to a translation dictionary accessed by a server.

31.   The computer-readable medium of claim 30 further comprising updating a translation dictionary used by the client if the client indicates that it accepts the candidate translation as a proper translation.

32.   The computer-readable medium of claim 30 wherein accessing pages through a network comprises accessing web pages through the Internet.

33.   The computer-readable medium of claim 32 wherein the page identifier is a link to a web page that contains the translations.

34.   The computer-readable medium of claim 30 further comprising returning at least two candidate translations for the source phrase to the client.

35.   The computer-readable medium of claim 34 further comprising receiving the source phrase form multiple clients, returning at least two candidate translations to each client, receiving an indication as to whether the client accepts a candidate translation as a proper translation from multiple clients, and using the multiple indications to determine whether to add a translation to a translation dictionary.